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INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 10997P3 WO/RH	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA416)	
International application No. PCT/GB 03/03549	International filing date (day/month/year) 14.08.2003	Priority date (day/month/year) 14.08.2002
International Patent Classification (IPC) or both national classification and IPC A01N37/36, A01N37/36		
Applicant RECKITT BENCKISER INC. et al.		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>		
Date of submission of the demand 26.01.2004	Date of completion of this report 07.06.2004	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Bertrand, F Telephone No. +49 89 2399-8606 	

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB 03/03549

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-35 as originally filed

Claims, Numbers

1-166 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

see separate sheet

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III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 1-166(all partly)

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the said claims Nos. 1-166(all partly)

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the Standard.

☐ the computer readable form has not been furnished or does not comply with the Standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-166
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-166
Industrial applicability (IA)	Yes: Claims	1-166
	No: Claims	

2. Citations and explanations

see separate sheet

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International application No. PCT/GB03/03549

Re Item I

Basis of the report

The documents mentioned in this International Preliminary Examination Report are numbered in accordance with the order they appear in the International Search Report.

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The ISA carried out an incomplete search (Arts.5, 6 and 17 PCT) for the following reason:

The wording "(a) organic acid" and even the descriptive general formula given in claim 2 is so broad, that a search cannot be carried out within its whole scope, too many alternatives being to be taken into account. Further, the polymer (b) is defined in claim 1 only by a complexing property with respect to (a). This property is intrinsically present in many polymers, but since this property is not necessarily mentioned in the prior art, it is not possible to carry out a complete search as to the polymer either.

Therefore, the search has been limited to combinations of acids as listed in claim 3 and polymers as listed in claim 4. **Consequently, the present report solely relates to this searched subject-matter.**

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The present application lacks conciseness. Actually, the term "concise" as it can be read in Art. 6(ii) and Rule 6.1a PCT and in the PCT Guidelines PG-III 5.1, should be interpreted not only as a requirement to shorten each Claim individually, but also to reduce as much as possible the number of Claims, especially the independent ones, and to avoid claiming twice or more the same features.

In this respect, the present application contains 5 independant claims of the same category (claims 1, 39, 72, 99 and 129). It appears that claims 39, 72 and 99 should be made dependant from claim 1 because all their technical features are already present in claim

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1 and further claim 129 is obsolete as having the same scope as claim 1. Moreover, 166 is not a reasonable number of claims for defining an invention and introduces a doubt on what exactly the invention is.

The present invention relates to an aqueous disinfectant composition containing a disinfecting organic acid complexed with a polymer.

D1 describes the antimicrobial properties of organic acids in general and specifically in relation with teat dips for preventing mastitis and an immediate and long lasting antimicrobial effect is obtained. In the examples of D1, PVP K-90 is often present. This polymer is mentioned in the present application as a suitable complexing agent for the organic acids.

D2 describes complexes of organic acids (e.g. citric acid) with N-vinyl-lactam copolymers (e.g. PVP K-30), the obtained effects being mainly the elimination/reduction of surfactant needs, the retention of the active ingredient on the site of application and the enhanced solubility.

D3 teaches the advantages of using an anionic polymer for delivering a cationic chemical. In the present case, the situation is reversed, but when the technical problem is to deliver known anionic chemicals, the selection of the corresponding counter-ionic polymer is obvious.

So far, the contribution to the art is unclear. Whereas novelty with respect to D1 and D2 is formally provided by the copolymer used instead of an homopolymer, it does not appear at the present stage what unexpected effect results therefrom. The cited prior art clearly teaches the advantages of using a complexing polymer as counterionic part for ionic active chemicals to be delivered. Therefore, the present application does not fulfill the criteria of Article 33(3) PCT, because the claimed subject-matter does not involve an inventive step (Rule 65(1) and (2) PCT).